

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
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## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 2004UR013		Date of mailing (day/month/year) <b>12 JAN 2006</b>
<b>FOR FURTHER ACTION</b> See paragraph 2 below		
International application No. PCT/US05/17363	International filing date (day/month/year) 17 May 2005 (17.05.2005)	Priority date (day/month/year) 20 May 2004 (20.05.2004)
International Patent Classification (IPC) or both national classification and IPC IPC(7): E04G 21/00; E04B 5/00 and US Cl.: 52/745.02, 67, 79., 334, 284, 414, 270, 796.1, 794.1, 650.3		
Applicant EXXONMOBIL UPSTREAM RESEARCH COMPANY		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I      Basis of the opinion
- ☐ Box No. II      Priority
- ☐ Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV      Lack of unity of invention
- ☒ Box No. V      Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI      Certain documents cited
- ☐ Box No. VII      Certain defects in the international application
- ☒ Box No. VIII      Certain observations on the international application

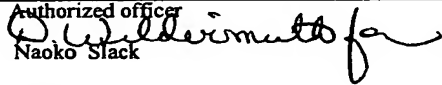
### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Date of completion of this opinion 21 December 2005 (21.12.2005)	Authorized officer  Naoko Slack Telephone No. (571) 272-6848
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US05/17363

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed  
☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ on paper  
☐ in electronic form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in electronic form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
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**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims <u>1-19</u>	YES
	Claims <u>20-25</u>	NO
Inventive step (IS)	Claims <u>1-19</u>	YES
	Claims <u>20-25</u>	NO
Industrial applicability (IA)	Claims <u>1-25</u>	YES
	Claims <u>NONE</u>	NO

**2. Citations and explanations:**

Claims 23-25 lack novelty under PCT Article 33(2) as being anticipated by US patent 4,282,619 to Rooney. Rooney discloses a roof panel comprising a steel truss structure (22-24, Figure 5), a steel barrier layer (50, Figure 5) placed atop the truss structure, and a concrete plate (51, Figure 5) placed over the barrier.

Claims 20-22 lack an inventive step under PCT Article 33(3) as being obvious over US Patent 6,673,412 to Ramesh et al. and US Patent 6,484,464 to Ochoa.

Ochoa discloses a panel comprising a concrete plate (10) and steel beam (12). While Ochoa does not disclose the finishing layers atop the concrete plate, it is well known in the art to finish a panel with insulating and covering materials of preference. For example, Ramesh et al. discloses placing a moisture barrier atop a concrete layer (column 1, lines 34-39) to prevent passage of water vapor. Furthermore, an insulation layer (12) and an uppermost metallic layer (17) are placed atop the moisture barrier.

Claims 1-7 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a containment system comprising a floor slab, a primary container positioned on the floor slab and a secondary container peripherally positioned around the primary container, the secondary container comprising a plurality of joined steel-concrete wall panels attached to the floor slab.

Claims 8-19 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a method of assembling a containment system by pouring a flat slab, erecting a secondary container with an end wall and two side walls, moving a primary container into the secondary container, and erecting a second end wall to enclose the primary container.

Claims 1-25 meet the criteria set out in PCT Article 33(4), and thus claims 1-25 meet industrial applicability because the subject matter claimed can be made or used in industry.

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

Claim 23 is objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claim 23 is indefinite for the following reason(s): In line 2, "the wall" should probably be - - the roof - -.